OhioEdison
A FirstEnergy Company

76 South Main Street
Akron, Ohio 44308

February 14, 2011

Chief, Environmental Enforcement Section
Environmental & Natural Resources Division
DJ#90-5-2-1-06894
U.S. Department of Justice
601 D Street, NW
Washington, District of Columbia 20044-7611

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Office of Enforcement & Compliance Assurance
U.S. Environmental Protection Agency
1310 L Street, NW, Suite 202B
Washington, District of Columbia 20005

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U.S. EPA Region V
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77 West Jackson Boulevard
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Department Head
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Section Chief
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Chief, Environmental Protection Bureau
New York State Attorney General's Office
120 Broadway
New York, New York 10271

Bureau Chief, Air Bureau
State of Connecticut
Department of Environmental Protection
79 Elm Street
Hartford, Connecticut 06106

Administrator, Air & Environmental Quality
Compliance & Enforcement
P.O. Box 422
401 East State Street, Floor 4
Trenton, New Jersey 08625

Gentlemen and Ladies:

Re: Submittal of Eleventh Semiannual Progress Report Pursuant Paragraph 141 of the Consent Decree, Entered in Civil Action No. C2-99-1181

Ohio Edison Company (OE) submits the following semiannual progress report for the period July 1, 2010 through December 31, 2010, as required by paragraph 141 of the Consent Decree (CD).

Appendix (B)(I)(A) — Installation of NO_x and SO_2 Equipment

Project	Construction Schedule	Date of Contract Execution	Major Component Delivery	Estimated Percentage Complete	Estimated Construction Completion	Date of Final Installation	Acceptance Test
SA 1–2, 4–7 Low-NO_x Burners				100 %		In-service prior to Consent Decree	
SA 1–2, 4, 6–7 Overfired Air				100 %		In-service prior to Consent Decree	
SA 1–5 Combustion Optimization	See attached Schedule	4/14/05	All Equipment Received	100%		11/2/05	N/A
SA 1 SNCR	See attached Schedule	N/A – FE General Contractor	All Equipment Received	100%		6/16/06	N/A
SA 2 SNCR				100%		In-service prior to Consent Decree	
SA 3 SNCR	See attached Schedule	N/A – FE General Contractor	All Equipment Received	100%		11/07/05	N/A
SA 4 SNCR	See attached Schedule	N/A – FE General Contractor	All Equipment Received	100%		5/19/06	N/A
SA 5 SNCR	See attached Schedule	N/A – FE General Contractor	All Equipment Received	100%		4/28/06	N/A
SA 6 SNCR		N/A – FE General Contractor	All Equipment Received	100%		6/3/05	N/A
SA 7 SNCR				100%		In-service prior to Consent Decree	
SA 6 SCR	See attached Schedule	January 2005	All Equipment Received	100%		04/20/10	N/A
SA 7 SCR	See attached Schedule	January 2005	All Equipment Received	100%		5/31/10	N/A
SA 1-4 SO_2 Removal System	See attached Schedule	8/26/05	All Equipment Received	100%		05/31/10	N/A
SA 5 SO_2 Removal System	See attached Schedule	8/26/05	All Equipment Received	100%		06/30/10	11/12/10
SA 6 & 7 SO_2 Removal System	See attached Schedule	8/26/05	All Equipment Received	100%		6/30/10	11/12/10

Project	Construction Schedule	Date of Contract Execution	Major Component Delivery	Estimated Percentage Complete	Estimated Construction Completion	Date of Final Installation	Acceptance Test
MN 1 Scrubber Upgrades	See attached Schedule	N/A – FE General Contractor	All Equipment Received	100%		12/3/05	Completed 6/1/06
MN 2 Scrubber Upgrades	See attached Schedule	N/A – FE General Contractor	All Equipment Received	100%		11/8/06	Completed 6/19/07
MN 3 Scrubber Upgrades	See attached Schedule	N/A – FE General Contractor	All Equipment Received	100%		11/10/07	Completed 3/13/08
EL 5 Low-NO_x Burners, Overfired Air				100%		In-service prior to Consent Decree	
EL 5 SNCR	See attached Schedule	N/A – FE General Contractor	All Equipment Received	100%		2/26/07	N/A
Burger 4 SNCR	See attached Schedule	N/A – FE General Contractor	All Equipment Received	100%		11/24/08	N/A
Burger 5 SNCR	See attached Schedule	N/A – FE General Contractor	All Equipment Received	100%		12/08/08	N/A
Burger 4	Unit permanently shutdown on 12/31/10	NA	NA	NA	N/A	N/A	N/A
Burger 5	Unit permanently shutdown on 12/31/10	NA	NA	NA	N/A	N/A	N/A

Appendix (B)(I)(B) — 30-Day Rolling Average Emission Rates for NO_x and SO_2

CD Paragraph 56:

1. The Sammis Unit 1 NO_x 30-Day Rolling Average Emission Rate (lb/mmBtu) is attached for the period July 1, 2010 through December 31, 2010.

   The Sammis Unit 2 NO_x 30-Day Rolling Average Emission Rate (lb/mmBtu) is attached for the period July 1, 2010 through December 31, 2010.

   The Sammis Unit 3 NO_x 30-Day Rolling Average Emission Rate (lb/mmBtu) is attached for the period July 1, 2010 through December 31, 2010.

   The Sammis Unit 4 NO_x 30-Day Rolling Average Emission Rate (lb/mmBtu) is attached for the period July 1, 2010 through December 31, 2010.

   The Sammis Unit 5 NO_x 30-Day Rolling Average Emission Rate (lb/mmBtu) is attached for the period July 1, 2010 through December 31, 2010.

2. Sample calculations were previously submitted for Sammis Unit 1.

   Sample calculations were previously submitted for Sammis Unit 2.

   Sample calculations were previously submitted for Sammis Unit 3.

   Sample calculations were previously submitted for Sammis Unit 4.

   Sample calculations were previously submitted for Sammis Unit 5.

3. There were no deviations of the Sammis Unit 1 NO_x 30-Day Rolling Average Emission Rate during the period.

   There were no deviations of the Sammis Unit 2 NO_x 30-Day Rolling Average Emission Rate during the period.

   There were no deviations of the Sammis Unit 3 NO_x 30-Day Rolling Average Emission Rate during the period.

   There were no deviations of the Sammis Unit 4 NO_x 30-Day Rolling Average Emission Rate during the period.

   There were no deviations of the Sammis Unit 5 NO_x 30-Day Rolling Average Emission Rate during the period.

4. Sammis Units 1, 2, 3, 4, and 5 Startup and Shutdown.

Unit	Date and Time Fuel Combusted	Date and Time Synchronized	Date and Time Fire Extinguished	Fifth and Subsequent Cold Startup Period Within 30-Day Period
SA-1			7/16/10 2155	
SA-1	7/18/10 1852	07/19/10 0155	07/19/10 0330	
SA-1	07/20/10 1742	07/20/10 2337	09/24/10 2116	
SA-1	10/03/10 1940	10/04/10 0500		
SA-2			10/08/10 2153	
SA-2	10/10/10 1902	10/11/10 0204		
SA-3			7/30/10 0653	
SA-3	7/30/10 0703	7/30/10 1027	08/06/10 2103	
SA-3	08/09/10 0512	08/09/10 1115	09/25/10 0353	
SA-3	10/12/10 1505	10/13/10 0213	10/15/10 2147	
SA-3	10/31/10 1637	11/01/10 0427		
SA-4			08/18/10 0310	

Unit	Date and Time Fuel Combusted	Date and Time Synchronized	Date and Time Fire Extinguished	Fifth and Subsequent Cold Startup Period Within 30-Day Period
SA-4	08/21/10 0201	08/21/10 1244	10/06/10 0010	
SA-4	10/12/10 1501	10/13/10 0535	10/13/10 1730	
SA-4	10/13/10 2101	10/14/10 0051	11/04/10 0501	
SA-4	11/06/10 1415	11/06/10 2249		
SA-5			07/09/10 2231	
SA-5	07/11/10 2332	07/12/10 0509	10/16/10 1141	
SA-5	10/31/10 2125	11/01/10 0758	11/24/10 2220	
SA-5	11/26/10 0938	11/28/10 2001		

CD Paragraph 89:

1. The Sammis Unit 1 SO_2 30-Day Rolling Average Emission Rate (lb/mmBtu) is attached for the period July 1, 2010 through December 31, 2010.

   The Sammis Unit 2 SO_2 30-Day Rolling Average Emission Rate (lb/mmBtu) is attached for June 30, 2010 through December 31, 2010.

   The Sammis Unit 3 SO_2 30-Day Rolling Average Emission Rate (lb/mmBtu) is attached for the period July 1, 2010 through December 31, 2010.

   The Sammis Unit 4 SO_2 30-Day Rolling Average Emission Rate (lb/mmBtu) is attached for the period July 1, 2010 through December 31, 2010.

2. Sample calculations were previously submitted for Sammis Unit 1.

   Sample calculations were previously submitted for Sammis Unit 2.

   Sample calculations were previously submitted for Sammis Unit 3.

   Sample calculations were previously submitted for Sammis Unit 4.

3. There were no deviations of the Sammis Unit 1 SO_2 30-Day Rolling Average Emission Rate during the period.

   There were no deviations of the Sammis Unit 2 SO_2 30-Day Rolling Average Emission Rate during the period.

   There were no deviations of the Sammis Unit 3 SO_2 30-Day Rolling Average Emission Rate during the period.

There were no deviations of the Sammis Unit 4 SO_2 30-Day Rolling Average Emission Rate during the period.

4. Sammis Units 1, 2, 3, and 4 Startup and Shutdown.

Unit	Date and Time Fuel Combusted	Date and Time Synchronized	Date and Time Fire Extinguished	Fifth and Subsequent Cold Startup Period Within 30-Day Period
SA-1			7/16/10 2155	
SA-1	7/18/10 1852	07/19/10 0155	07/19/10 0330	
SA-1	07/20/10 1742	07/20/10 2337	09/24/10 2116	
SA-1	10/03/10 1940	10/04/10 0500		
SA-2			10/08/10 2153	
SA-2	10/10/10 1902	10/11/10 0204		
SA-3			7/30/10 0653	
SA-3	7/30/10 0703	7/30/10 1027	08/06/10 2103	
SA-3	08/09/10 0512	08/09/10 1115	09/25/10 0353	
SA-3	10/12/10 1505	10/13/10 0213	10/15/10 2147	
SA-3	10/31/10 1637	11/01/10 0427		
SA-4			08/18/10 0310	
SA-4	08/21/10 0201	08/21/10 1244	10/06/10 0010	
SA-4	10/12/10 1501	10/13/10 0535	10/13/10 1730	
SA-4	10/13/10 2101	10/14/10 0051	11/04/10 0501	
SA-4	11/06/10 1415	11/06/10 2249		

Appendix (B)(I)(C) — PM Emission Rates

CD Paragraph 110: OE complied with the Unit 6 and Unit 7 particulate matter (PM) emissions rate testing. The annual PM test was conducted on August 10, 2010 at outlet flue A and outlet flue B. The results of the PM test were less than the PM emissions rate limit of 0.030 lb/mmBtu. Flue A PM test result was 0.009 lb/mmBtu PM rate while flue B PM test result was 0.007 lb/mmBtu PM rate.

Appendix (B)(I)(D) — Plant-Wide Annual Cap and Monthly Cap

NO_x

CD Paragraph 69: OE complied with the Plant-Wide Annual Cap for the Sammis plant for NO_x, which applies collectively to all units within the Sammis plant for the period January 1, 2010 through December 31, 2010. The Plant-Wide Annual Cap was 17,328 tons, and the actual emissions for this period were 11,496 tons.

CD Paragraph 70: Compliance with the Plant-Wide Annual Cap for the period January 1, 2010 through December 31, 2010 was determined by calculating actual annual emissions during all periods of Sammis plant operation using CEMS.

SO_2

CD Paragraph 93: OE complied with the Plant-Wide Annual Cap for the Sammis plant for SO_2, which applies collectively to all units within the Sammis plant for the period January 1, 2010 through December 31, 2010. The Plant-Wide Annual Cap was 101,500 tons, and the actual emissions for this period were 12,761 tons.

CD Paragraph 94: Compliance with the Monthly Cap for Sammis 1 through 5 for SO_2, which applies for May 2010 through September 2010. The Monthly Cap was 3,242 tons for May 2010, July 2010, and August 2010. The Monthly Cap was 3,137 tons for June 2010 and September 2010. The Sammis 1 through 5 actual Monthly emissions for May 1, 2010 to May 31, 2010 was 125 tons. The Sammis 1 through 5 actual Monthly emissions for June 1, 2010 to June 30, 2010 was 281 tons. The Sammis 1 through 5 actual Monthly emissions for July 1, 2010 to July 31, 2010 was 110 tons. The Sammis 1 through 5 actual Monthly emissions for August 1, 2010 to August 31, 2010 was 152 tons. The Sammis 1 through 5 actual Monthly emissions for September 1, 2010 to September 30, 2010 was 218 tons.

CD Paragraph 95: Compliance with the Plant-Wide Annual Cap for the period January 1, 2010 through December 31, 2010 was determined by calculating actual annual emissions during all periods of Sammis plant operation using CEMS.

Appendix (B)(I)(E) — Additional Reductions

CD Paragraph 62: OE complied with the requirement to achieve 11,000 tons of additional Eastlake Plant NO_x Reductions for the period January 1, 2010 through December 31, 2010. Eastlake Unit 5 contributed 9,752 tons of reductions. Additional reductions were achieved of 1,248 tons from Mansfield Unit 3 per the substitution plan approved on May 3, 2010.

CD Paragraph 65: OE complied with the requirement to achieve 1,400 tons of additional Burger Plant NO_x Reductions for the period January 1, 2010 through December 31, 2010. Burger Units 4 and 5 contributed 662 tons of reductions. Additional reductions were achieved of 738 tons from Mansfield Unit 3 per the substitution plans approved May 3, 2010.

CD Paragraph 91: OE complied with the requirement to demonstrate the Mansfield Units 1, 2, and 3 FGD Removal Efficiency. The Removal Efficiency requirement for each unit was 95 percent, and the actual Removal Efficiency was 97.5, 96.5, and 98.4 percent, respectively, for Units 1, 2, and 3. Compliance with the Removal Efficiency requirement for the period January 1, 2010 through December 31, 2010 was determined by CEMs data and coal sampling conducted on October 21, 2010 for Unit 1; October 21, 2010 for Unit 2; and December 10, 2010 for Unit 3. See attached summaries.

CD Paragraph 92: OE complied with the 12,000 tons of additional Mansfield Plant SO_2 Reductions for Mansfield Units 1, 2, and 3 for the period January 1, 2010 through December 31, 2010. The Additional Mansfield SO_2 Reductions required were 12,000 tons, and the actual reductions were 15,733 tons.

Appendix (B)(I)(F) — Interim Reductions for NO_x and SO_2

CD Paragraph 72: OE achieved 2,483 tons of the 2,483 tons of Interim NO_x Emission Reductions required by CD Paragraph 72 during the period July 1, 2005 and December 31, 2008.

CD Paragraph 97: OE achieved 35,000 tons of the 35,000 tons SO_2 Interim Emission Reductions required by CD Paragraph 97 during the period January 1, 2006 and December 31, 2008.

CD Paragraph 98: OE achieved 24,600 tons of the 24,600 tons SO_2 Interim Emission Reductions required by CD Paragraph 98 during the period January 1, 2007 and December 31, 2008.

Appendix (B)(I)(G) — Surrender of Restricted SO_2 Allowances

Nothing to report.

Appendix (B)(I)(H) — Generation of Super-Compliant Allowances

CAIR (Annual NO_x)
CD Paragraph 72: OE generated 8,846 Super-Compliant NO_x allowances between January 1, 2010 and December 31, 2010 at the W.H. Sammis Plant by installing an SCR at Sammis Unit 7 prior to December 31, 2010 date and at Sammis 6 prior to the December 31, 2011 date. The Super-Compliant allowances were calculated as follows.

> The 2003 Sammis 7 annual NOx rate was 0.372 lb/mmBtu. The 2010 Sammis 7 annual NOx emission rate was 0.168 lbs/mmBtu. Sammis Unit 7 annual NOx rate reduction was 0.204 lb/mmBtu. Multiply this by Sammis 7's 2010 annual Heat Input of 32,809,433 lb/mmBtu to get 3,348 Sammis 7 identified Super-Compliant tons.

The 2003 Sammis 6 annual NOx rate was 0.487 lb/mmBtu. The 2010 Sammis 6 NOx emission rate was 0.154 lbs/mmBtu. Sammis Unit 6 NOx rate reduction was 0.333 lb/mmBtu. Multiply this by Sammis 6's 2010 annual Heat Input of 33,014,945 lb/mmBtu to get 5,498 Sammis 6 identified Super-Compliant tons.

CAIR (Ozone Season NO_x)

CD Paragraph 72: OE generated 5,042 Super-Compliant Ozone season NO_x allowances between May 1, 2010 and September 30, 2010 at the W.H. Sammis Plant by installing an SCR at Sammis Unit 7 prior to December 31, 2010 date and at Sammis 6 prior to the December 31, 2011 date. The Super-Compliant allowances were calculated as follows.

The 2003 Sammis 7 Ozone Season NOx rate was 0.351 lb/mmBtu. The 2010 Sammis 7 Ozone Season NOx emission rate was 0.146 lbs/mmBtu. Sammis Unit 7 Ozone Season NOx rate reduction was 0.205 lb/mmBtu. Multiply this by Sammis 7's 2010 Ozone Season Heat Input of 18,188,587 lb/mmBtu to get 1,868 Sammis 7 identified Super-Compliant Ozone Season tons.

The 2003 Sammis 6 Ozone Season NOx rate was 0.481 lb/mmBtu. The 2010 Sammis 6 Ozone Season NOx emission rate was 0.155 lbs/mmBtu. Sammis Unit 6 Ozone Season NOx rate reduction was 0.326 lb/mmBtu. Multiply this by Sammis 6's 2010 Ozone Season Heat Input of 19,472,906 lb/mmBtu to get 3,174 Sammis 6 identified Super-Compliant Ozone Season tons.

Title IV (SO_2)

CD Paragraph 106: OE generated 92,760 Super-Compliant SO_2 allowances between January 1, 2010 and December 31, 2010 from the W.H. Sammis Plant by installing Flue Gas Conditioning on Units 1-7 before December 31, 2010. The Super-Compliant allowances were calculated as follows.

The 2003 Sammis 7 SO_2 rate was 1.99 lbs/mmBtu. The 2010 Sammis 7 SO_2 rate was 0.334 lbs/mmBtu. Sammis Unit 7 SO2 rate reduction was 1.656 lb/mmBtu. Multiply this by the 2010 Annual Heat Input of 32,809,433 lb/mmBtu to get 27,231 Super compliant SO2 tons.

The 2003 Sammis 6 SO_2 rate was 1.98 lbs/mmBtu. The 2010 Sammis 6 SO_2 rate was 0.075 lbs/mmBtu. Sammis Unit 6 SO2 rate reduction was 1.905 lb/mmBtu. Multiply this by the 2010 Annual Heat Input of 33,014,945 lb/mmBtu to get 31,473 Sammis 6 identified Super-Compliant SO2 tons.

The 2003 Sammis 5 SO_2 rate was 2.08 lbs/mmBtu. The 2010 Sammis 5 SO_2 rate was 0.074 lbs/mmBtu. Sammis Unit 5 SO2 rate reduction was 2.006 lb/mmBtu. Multiply this by the 2010 Annual Heat Input of 16,659,539 lb/mmBtu to get 16,667 Sammis 5 identified Super-Compliant SO2 tons.

The Sammis Unit 4 SO_2 Consent Decree rate was 1.10 lbs/mmBtu. The 2010 Sammis 4 SO_2 rate was 0.091 lbs/mmBtu. Sammis Unit 4 SO2 rate reduction was 1.009 lb/mmBtu.

Multiply this by the 2010 Annual Heat Input of 9,669,508 lb/mmBtu to get 4,878 Sammis 4 identified Super-Compliant SO2 tons.

The Sammis Unit 3 SO_2 Consent Decree rate was 1.10 lbs/mmBtu. The 2010 Sammis 3 SO_2 rate was 0.221 lbs/mmBtu. Sammis Unit 3 SO2 rate reduction was 0.879 lb/mmBtu. Multiply this by the 2010 Annual Heat Input of 9,733,506 lb/mmBtu to get 4,278 Sammis 3 identified Super-Compliant SO2 tons.

The Sammis Unit 2 SO_2 Consent Decree rate was 1.10 lbs/mmBtu. The 2010 Sammis 2 SO_2 rate was 0.381 lbs/mmBtu. Sammis Unit 2 SO2 rate reduction was 0.719 lb/mmBtu. Multiply this by the 2010 Annual Heat Input of 11,171,073 lb/mmBtu to get 4,013 Sammis 2 identified Super-Compliant SO2 tons.

The Sammis Unit 1 SO_2 Consent Decree rate was 1.10 lbs/mmBtu. The 2010 Sammis 1 SO_2 rate was 0.327 lbs/mmBtu. Sammis Unit 1 SO2 rate reduction was 0.773 lb/mmBtu. Multiply this by the 2010 Annual Heat Input of 10,924,179 lb/mmBtu to get 4,220 Sammis 1 identified Super-Compliant SO2 tons.

Appendix (B)(I)(I) — NO_x System-Wide Annual Emission Rate

Nothing to report.

Appendix (B)(I)(J) — Environmentally Beneficial Projects

1. **Cash Contributions**

   Nothing to report.

2. **Renewable Energy Development Projects**

Date of Execution	Megawatts	Location	Commencement of Operation	Description
3/21/2006	16	Cambria County, PA	6/29/2007	Wind turbine purchase power agreement for 23-year term entered into by FES, an affiliate of OE (agreement previously submitted)
7/08/2008	62.5	Adams County, PA	8/31/2009	Wind turbine purchase power agreement for 22-year term entered into by FES, an affiliate of OE (agreement previously submitted)
1/09/2009	16	Cambria County, PA	8/12/2009	Wind turbine purchase power agreement for 23-year term entered into by FES, an affiliate of OE (agreement previously submitted)

Appendix (B)(II) — Deviation Reports

Nothing to report.

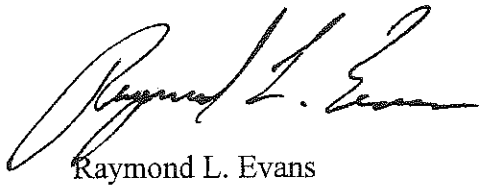
Appendix (B)(III) – Ohio Edison Submissions

Date Submitted	Plans/Submissions	Pending Review and Approval
Nothing to report		

Certification

"This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manages the system, or the persons(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States."

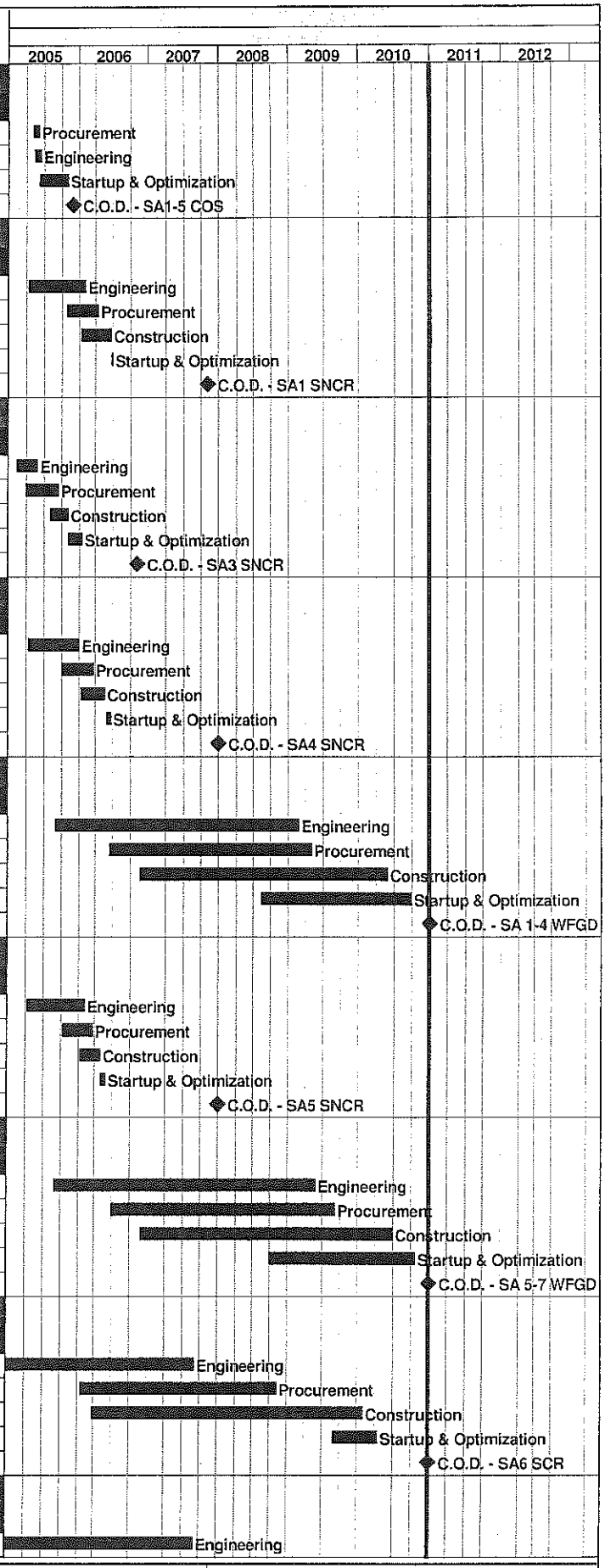
Sincerely,



Raymond L. Evans
Director, Environmental

Attachments
By UPS Ground

Activity Description	% Comp	Current Start	Current Finish
Sammis 1-5			
Combustion Optimization System (COS)			
Procurement	100	05/06/05A	06/06/05A
Engineering	100	05/19/05A	06/16/05A
Startup & Optimization	100	06/13/05A	11/02/05A
C.O.D. - SA1-5 COS	100		12/01/05A
Sammis 1			
Selective Non-Catalytic Reduction (SNCR)			
Engineering	100	04/11/05A	02/01/06A
Procurement	100	10/31/05A	04/14/06A
Construction	100	01/09/06A	06/16/06A
Startup & Optimization	100	06/19/06A	06/30/06A
C.O.D. - SA1 SNCR	100		10/31/07A
Sammis 3			
Selective Non-Catalytic Reduction (SNCR)			
Engineering	100	02/14/05A	05/29/05A
Procurement	100	04/04/05A	09/16/05A
Construction	100	08/08/05A	11/06/05A
Startup & Optimization	100	11/07/05A	01/21/06A
C.O.D. - SA3 SNCR	100		10/31/06A
Sammis 4			
Selective Non-Catalytic Reduction (SNCR)			
Engineering	100	04/11/05A	01/01/06A
Procurement	100	10/01/05A	03/20/06A
Construction	100	01/09/06A	05/19/06A
Startup & Optimization	100	05/22/06A	06/16/06A
C.O.D. - SA4 SNCR	100		12/31/07A
Sammis 1-4			
Wet Flue Gas Desulfurization (WFGD)			
Engineering	100	08/31/05A	02/28/09A
Procurement	100	06/12/06A	04/30/09A
Construction	100	11/19/06A	05/31/10A
Startup & Optimization	100	08/11/08A	09/30/10A
C.O.D. - SA 1-4 WFGD	100		12/31/10A
Sammis 6			
Selective Non-Catalytic Reduction (SNCR)			
Engineering	100	04/11/05A	02/01/06A
Procurement	100	10/11/05A	03/20/06A
Construction	100	01/09/06A	04/28/06A
Startup & Optimization	100	05/01/06A	05/26/06A
C.O.D. - SA5 SNCR	100		12/31/07A
Sammis 5-7			
Wet Flue Gas Desulfurization (WFGD)			
Engineering	100	08/31/05A	05/31/09A
Procurement	100	07/01/06A	09/02/09A
Construction	100	11/27/06A	06/30/10A
Startup & Optimization	100	10/01/08A	10/31/10A
C.O.D. - SA 5-7 WFGD	100		12/31/10A
Sammis 6			
Selective Catalytic Reduction (SCR)			
Engineering	100	12/27/04A	08/31/07A
Procurement	100	01/20/06A	11/08/08A
Construction	100	03/20/06A	02/06/10A
Startup & Optimization	100	08/31/09A	04/20/10A
C.O.D. - SA6 SCR	100		12/31/10A
Sammis 7			
Selective Catalytic Reduction (SCR)			
Engineering	100	12/27/04A	08/31/07A



Start Date 09/20/04
Finish Date 12/31/12
Data Date 01/01/11
Run Date 02/07/11 08:41

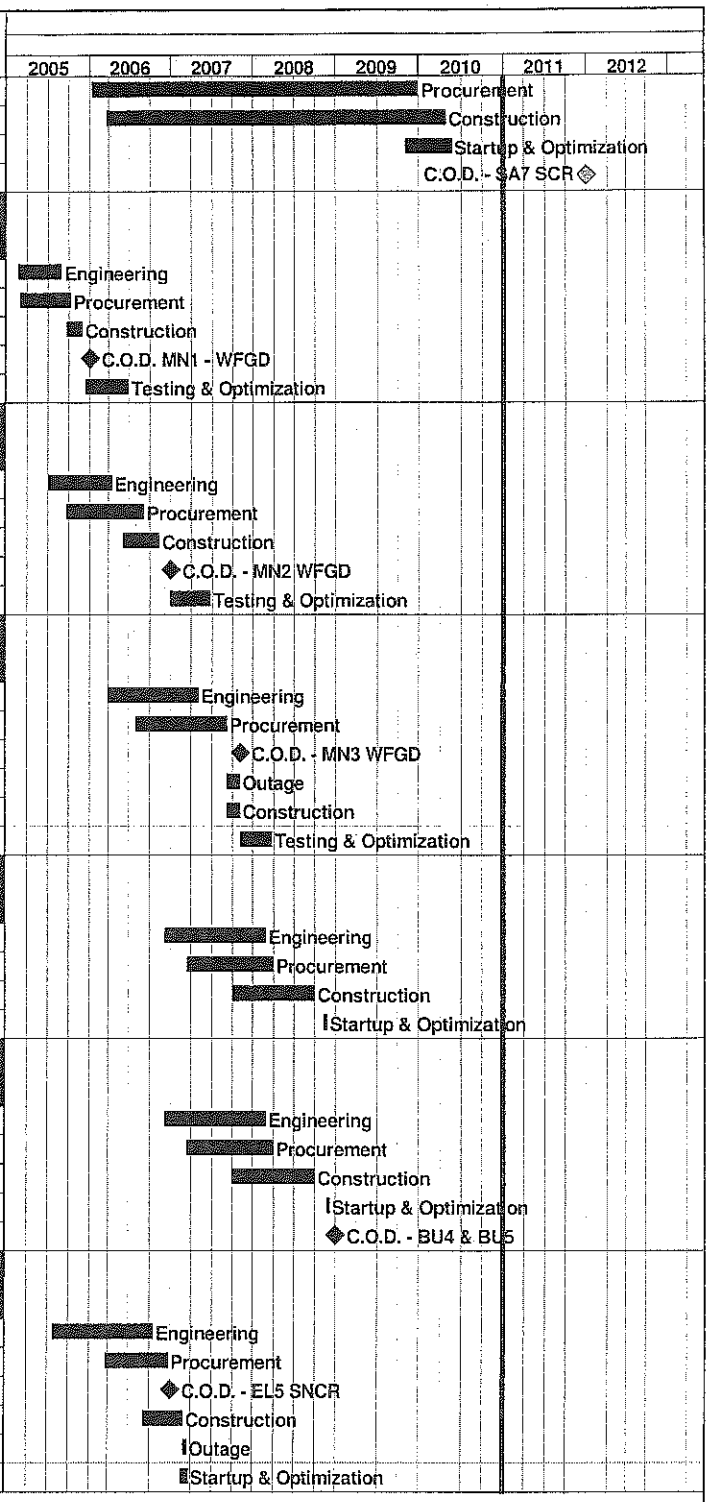
FirstEnergy Corp

Consent Decree

Level 1 Schedule

Date	Revision	Checked	Approved
02/05/07	Rev. 3		
01/25/08	Rev. 4		
08/05/08	Rev. 5		

Activity Description	% Comp	Current Start	Current Finish
Procurement	100	01/09/06A	12/31/09A
Construction	100	03/20/06A	04/30/10A
Startup & Optimization	100	10/31/09A	05/21/10A
C.O.D. - SA7 SCR	0		12/31/11*
Mansfield 1			
Wet Flue Gas Desulfurization (WFGD)			
Engineering	100	02/21/05A	08/31/05A
Procurement	100	02/28/05A	10/09/05A
Construction	100	09/24/05A	12/03/05A
C.O.D. MN1 - WFGD	100		12/31/05A
Testing & Optimization	100	12/16/05A	06/23/06A
Mansfield 2			
Wet Flue Gas Desulfurization (WFGD)			
Engineering	100	07/04/05A	04/12/06A
Procurement	100	09/24/05A	09/05/06A
Construction	100	06/01/06A	11/03/06A
C.O.D. - MN2 WFGD	100		12/31/06A
Testing & Optimization	100	01/01/07A	06/20/07A
Mansfield 3			
Wet Flue Gas Desulfurization (WFGD)			
Engineering	100	03/27/06A	04/28/07A
Procurement	100	07/27/06A	08/31/07A
C.O.D. - MN3 WFGD	100		10/31/07A
Outage	100	09/01/07A	11/03/07A
Construction	100	09/01/07A	11/03/07A
Testing & Optimization	100	11/04/07A	03/24/08A
Burger Units 4 & 5			
Selective Non-Catalytic Reduction (SNCR)			
Engineering	100	12/01/06A	02/29/08A
Procurement	100	03/14/07A	03/31/08A
Construction	100	09/29/07A	09/26/08A
Startup & Optimization	100	11/10/08A	11/24/08A
Burger 5			
Selective Non-Catalytic Reduction (SNCR)			
Engineering	100	12/01/06A	02/29/08A
Procurement	100	03/14/07A	03/31/08A
Construction	100	09/29/07A	09/26/08A
Startup & Optimization	100	12/01/08A	12/08/08A
C.O.D. - BU4 & BU5	100		12/31/08A
Eastlake 5			
Selective Non-Catalytic Reduction (SNCR)			
Engineering	100	08/01/05A	10/13/06A
Procurement	100	03/19/06A	12/20/06A
C.O.D. - EL5 SNCR	100		12/31/06A
Construction	100	09/05/06A	02/24/07A
Outage	100	02/26/07A	03/12/07A
Startup & Optimization	100	02/12/07A	03/17/07A



C.O.D. - Consent Order Date

Sammis 1-5 NOx 30-Day Rolling Average

July 1, 2010 through December 31, 2010

Date	Boiler-1 NOx 30-day Rolling Average Emission Rate (lb/mmBtu)	Boiler-2 NOx 30-day Rolling Average Emission Rate (lb/mmBtu)	Boiler-3 NOx 30-day Rolling Average Emission Rate (lb/mmBtu)	Boiler-4 NOx 30-day Rolling Average Emission Rate (lb/mmBtu)	Boiler-5 NOx 30-day Rolling Average Emission Rate (lb/mmBtu)
07/01/10	0.233	0.218	0.205	0.210	0.277
07/02/10	0.233	0.218	0.205	0.209	0.276
07/03/10	0.233	0.217	0.206	0.208	0.275
07/04/10	0.233	0.217	0.206	0.203	0.272
07/05/10	0.233	0.218	0.206	0.201	0.272
07/06/10	0.235	0.218	0.207	0.201	0.271
07/07/10	0.236	0.219	0.208	0.202	0.270
07/08/10	0.237	0.219	0.208	0.202	0.268
07/09/10	0.237	0.220	0.208	0.202	0.267
07/10/10	0.237	0.220	0.208	0.203	0.267
07/11/10	0.237	0.219	0.209	0.203	0.267
07/12/10	0.237	0.220	0.208	0.204	0.267
07/13/10	0.237	0.221	0.208	0.204	0.266
07/14/10	0.236	0.222	0.208	0.204	0.269
07/15/10	0.237	0.222	0.208	0.205	0.270
07/16/10	0.237	0.223	0.208	0.206	0.271
07/17/10	0.237	0.224	0.208	0.206	0.270
07/18/10	0.237	0.224	0.207	0.206	0.271
07/19/10	0.237	0.225	0.206	0.206	0.270
07/20/10	0.237	0.226	0.206	0.206	0.271
07/21/10	0.237	0.228	0.206	0.205	0.271
07/22/10	0.237	0.228	0.206	0.205	0.273
07/23/10	0.236	0.229	0.206	0.206	0.273
07/24/10	0.236	0.230	0.207	0.206	0.273
07/25/10	0.235	0.230	0.206	0.205	0.269
07/26/10	0.234	0.231	0.206	0.204	0.268
07/27/10	0.234	0.232	0.205	0.205	0.266

07/28/10	0.233	0.234	0.206	0.206	0.266
07/29/10	0.233	0.235	0.206	0.207	0.265
07/30/10	0.233	0.235	0.206	0.207	0.265
07/31/10	0.233	0.233	0.206	0.207	0.264
08/01/10	0.232	0.232	0.206	0.207	0.264
08/02/10	0.232	0.232	0.206	0.207	0.265
08/03/10	0.232	0.233	0.207	0.207	0.267
08/04/10	0.232	0.235	0.207	0.207	0.269
08/05/10	0.233	0.236	0.207	0.207	0.271
08/06/10	0.232	0.236	0.207	0.208	0.273
08/07/10	0.232	0.235	0.207	0.208	0.273
08/08/10	0.231	0.235	0.207	0.207	0.273
08/09/10	0.230	0.236	0.207	0.207	0.274
08/10/10	0.229	0.238	0.207	0.207	0.276
08/11/10	0.228	0.237	0.207	0.206	0.279
08/12/10	0.227	0.235	0.207	0.206	0.281
08/13/10	0.226	0.234	0.207	0.206	0.282
08/14/10	0.226	0.232	0.207	0.206	0.282
08/15/10	0.226	0.230	0.207	0.205	0.280
08/16/10	0.225	0.231	0.207	0.206	0.281
08/17/10	0.224	0.230	0.206	0.207	0.281
08/18/10	0.223	0.229	0.206	0.207	0.281
08/19/10	0.223	0.229	0.206	0.207	0.282
08/20/10	0.223	0.230	0.207	0.207	0.281
08/21/10	0.222	0.230	0.208	0.207	0.278
08/22/10	0.222	0.229	0.207	0.206	0.276
08/23/10	0.221	0.228	0.207	0.205	0.275
08/24/10	0.221	0.228	0.207	0.204	0.276
08/25/10	0.222	0.227	0.206	0.203	0.276
08/26/10	0.222	0.227	0.205	0.202	0.277
08/27/10	0.222	0.225	0.205	0.200	0.277

08/28/10	0.221	0.224	0.205	0.200	0.277
08/29/10	0.220	0.225	0.205	0.199	0.277
08/30/10	0.219	0.227	0.204	0.198	0.277
08/31/10	0.219	0.228	0.204	0.197	0.279
09/01/10	0.219	0.229	0.204	0.196	0.279
09/02/10	0.219	0.229	0.204	0.195	0.279
09/03/10	0.219	0.227	0.205	0.194	0.278
09/04/10	0.216	0.225	0.204	0.193	0.275
09/05/10	0.214	0.225	0.203	0.193	0.273
09/06/10	0.213	0.223	0.202	0.192	0.272
09/07/10	0.213	0.223	0.201	0.192	0.272
09/08/10	0.213	0.222	0.199	0.191	0.270
09/09/10	0.212	0.220	0.199	0.189	0.269
09/10/10	0.212	0.220	0.199	0.188	0.267
09/11/10	0.211	0.220	0.198	0.187	0.264
09/12/10	0.209	0.219	0.197	0.187	0.261
09/13/10	0.209	0.221	0.197	0.186	0.259
09/14/10	0.209	0.222	0.196	0.185	0.259
09/15/10	0.208	0.220	0.196	0.185	0.257
09/16/10	0.208	0.220	0.196	0.185	0.255
09/17/10	0.208	0.219	0.196	0.184	0.254
09/18/10	0.207	0.218	0.196	0.184	0.251
09/19/10	0.205	0.216	0.196	0.183	0.250
09/20/10	0.205	0.215	0.196	0.182	0.250
09/21/10	0.205	0.215	0.196	0.182	0.251
09/22/10	0.204	0.215	0.196	0.183	0.251
09/23/10	0.203	0.215	0.197	0.184	0.251
09/24/10	0.202	0.215	0.198	0.185	0.251
09/25/10	0.202	0.214	0.198	0.185	0.250
09/26/10	0.202	0.213	0.198	0.185	0.248
09/27/10	0.202	0.213	0.198	0.186	0.249

09/28/10	0.202	0.213	0.198	0.187	0.250
09/29/10	0.202	0.213	0.198	0.188	0.251
09/30/10	0.202	0.212	0.198	0.188	0.251
10/01/10	0.202	0.212	0.198	0.188	0.251
10/02/10	0.202	0.211	0.198	0.188	0.251
10/03/10	0.202	0.210	0.198	0.189	0.251
10/04/10	0.203	0.210	0.198	0.190	0.254
10/05/10	0.202	0.209	0.198	0.190	0.255
10/06/10	0.202	0.210	0.198	0.190	0.258
10/07/10	0.202	0.210	0.198	0.190	0.257
10/08/10	0.201	0.210	0.198	0.190	0.258
10/09/10	0.200	0.210	0.198	0.190	0.257
10/10/10	0.199	0.210	0.198	0.190	0.255
10/11/10	0.198	0.211	0.198	0.190	0.255
10/12/10	0.198	0.211	0.198	0.190	0.256
10/13/10	0.199	0.211	0.199	0.190	0.255
10/14/10	0.199	0.211	0.199	0.190	0.255
10/15/10	0.200	0.211	0.199	0.190	0.255
10/16/10	0.199	0.210	0.199	0.191	0.255
10/17/10	0.199	0.209	0.199	0.191	0.255
10/18/10	0.199	0.209	0.199	0.192	0.255
10/19/10	0.199	0.209	0.199	0.192	0.255
10/20/10	0.199	0.209	0.199	0.192	0.255
10/21/10	0.200	0.210	0.199	0.192	0.255
10/22/10	0.200	0.209	0.199	0.192	0.255
10/23/10	0.200	0.209	0.199	0.192	0.255
10/24/10	0.199	0.208	0.199	0.191	0.255
10/25/10	0.199	0.208	0.199	0.191	0.255
10/26/10	0.199	0.208	0.199	0.191	0.255
10/27/10	0.201	0.208	0.199	0.191	0.255
10/28/10	0.201	0.210	0.199	0.191	0.255

10/29/10	0.201	0.209	0.199	0.191	0.255
10/30/10	0.200	0.209	0.199	0.190	0.255
10/31/10	0.200	0.208	0.199	0.190	0.255
11/01/10	0.202	0.209	0.200	0.191	0.255
11/02/10	0.203	0.209	0.200	0.191	0.255
11/03/10	0.202	0.210	0.200	0.193	0.257
11/04/10	0.203	0.212	0.200	0.193	0.260
11/05/10	0.203	0.213	0.200	0.193	0.264
11/06/10	0.204	0.214	0.201	0.193	0.266
11/07/10	0.204	0.213	0.201	0.194	0.267
11/08/10	0.205	0.213	0.202	0.194	0.269
11/09/10	0.207	0.214	0.203	0.194	0.271
11/10/10	0.208	0.214	0.205	0.194	0.272
11/11/10	0.209	0.214	0.205	0.194	0.275
11/12/10	0.210	0.214	0.205	0.195	0.277
11/13/10	0.212	0.213	0.205	0.195	0.276
11/14/10	0.212	0.212	0.206	0.196	0.275
11/15/10	0.213	0.212	0.207	0.197	0.275
11/16/10	0.214	0.214	0.208	0.198	0.275
11/17/10	0.214	0.215	0.210	0.200	0.275
11/18/10	0.215	0.215	0.211	0.202	0.276
11/19/10	0.216	0.215	0.212	0.203	0.278
11/20/10	0.216	0.216	0.212	0.204	0.277
11/21/10	0.217	0.216	0.213	0.205	0.275
11/22/10	0.216	0.218	0.213	0.206	0.275
11/23/10	0.216	0.220	0.213	0.207	0.277
11/24/10	0.216	0.220	0.212	0.208	0.277
11/25/10	0.216	0.218	0.213	0.209	0.277
11/26/10	0.215	0.218	0.213	0.210	0.277
11/27/10	0.215	0.216	0.213	0.213	0.277
11/28/10	0.215	0.215	0.213	0.215	0.277

11/29/10	0.216	0.216	0.214	0.217	0.278
11/30/10	0.216	0.217	0.215	0.218	0.280
12/01/10	0.216	0.216	0.216	0.219	0.282
12/02/10	0.215	0.215	0.218	0.220	0.282
12/03/10	0.214	0.215	0.220	0.221	0.283
12/04/10	0.213	0.214	0.222	0.221	0.284
12/05/10	0.213	0.213	0.224	0.222	0.284
12/06/10	0.212	0.214	0.224	0.222	0.284
12/07/10	0.213	0.216	0.226	0.222	0.282
12/08/10	0.213	0.219	0.227	0.223	0.281
12/09/10	0.213	0.219	0.228	0.224	0.277
12/10/10	0.212	0.220	0.230	0.225	0.275
12/11/10	0.212	0.221	0.232	0.226	0.272
12/12/10	0.211	0.222	0.233	0.227	0.269
12/13/10	0.212	0.224	0.234	0.228	0.269
12/14/10	0.213	0.227	0.234	0.229	0.269
12/15/10	0.215	0.228	0.236	0.229	0.267
12/16/10	0.217	0.229	0.237	0.228	0.267
12/17/10	0.219	0.227	0.237	0.227	0.269
12/18/10	0.218	0.227	0.238	0.226	0.270
12/19/10	0.218	0.227	0.240	0.226	0.269
12/20/10	0.219	0.226	0.241	0.225	0.269
12/21/10	0.221	0.226	0.242	0.226	0.270
12/22/10	0.223	0.224	0.243	0.226	0.269
12/23/10	0.225	0.223	0.244	0.226	0.269
12/24/10	0.226	0.222	0.243	0.225	0.268
12/25/10	0.226	0.223	0.242	0.225	0.268
12/26/10	0.225	0.224	0.241	0.224	0.266
12/27/10	0.225	0.225	0.241	0.224	0.265
12/28/10	0.226	0.228	0.240	0.223	0.264
12/29/10	0.227	0.227	0.239	0.221	0.264

12/30/10	0.227	0.227	0.238	0.220	0.263
12/31/10	0.228	0.227	0.236	0.220	0.259

Sammis Unit 1-5 SO2 30-Day Rolling Average
July 1, 2010 through December 31, 2010

Date	Boiler-1 SO2 30-day Rolling Average Emission Rate (lb/mmBtu)	Boiler-2 SO2 30-day Rolling Average Emission Rate (lb/mmBtu)	Boiler-3 SO2 30-day Rolling Average Emission Rate (lb/mmBtu)	Boiler-4 SO2 30-day Rolling Average Emission Rate (lb/mmBtu)	Boiler-5 SO2 30-day Rolling Average Emission Rate (lb/mmBtu)
07/01/10	0.044	0.043	0.044	0.044	0.056
07/02/10	0.044	0.043	0.044	0.044	0.058
07/03/10	0.044	0.044	0.044	0.044	0.059
07/04/10	0.045	0.044	0.045	0.045	0.060
07/05/10	0.046	0.045	0.046	0.046	0.061
07/06/10	0.047	0.045	0.047	0.047	0.062
07/07/10	0.048	0.045	0.048	0.048	0.062
07/08/10	0.047	0.045	0.047	0.047	0.064
07/09/10	0.047	0.045	0.047	0.047	0.066
07/10/10	0.046	0.045	0.046	0.046	0.066
07/11/10	0.045	0.045	0.045	0.045	0.066
07/12/10	0.043	0.044	0.043	0.043	0.068
07/13/10	0.042	0.043	0.042	0.042	0.069
07/14/10	0.041	0.043	0.041	0.041	0.068
07/15/10	0.040	0.043	0.040	0.040	0.067
07/16/10	0.039	0.041	0.039	0.039	0.066
07/17/10	0.039	0.040	0.038	0.038	0.064
07/18/10	0.039	0.038	0.037	0.037	0.063
07/19/10	0.039	0.037	0.036	0.036	0.062
07/20/10	0.039	0.036	0.035	0.035	0.062
07/21/10	0.038	0.035	0.034	0.034	0.062
07/22/10	0.038	0.034	0.034	0.034	0.063
07/23/10	0.037	0.034	0.034	0.034	0.061
07/24/10	0.037	0.033	0.033	0.033	0.059
07/25/10	0.036	0.032	0.032	0.032	0.059
07/26/10	0.036	0.032	0.032	0.032	0.059
07/27/10	0.036	0.031	0.031	0.031	0.059
07/28/10	0.035	0.030	0.030	0.030	0.058
07/29/10	0.034	0.029	0.029	0.029	0.058
07/30/10	0.033	0.029	0.029	0.029	0.057
07/31/10	0.032	0.028	0.028	0.028	0.057
08/01/10	0.032	0.028	0.028	0.028	0.056
08/02/10	0.032	0.028	0.028	0.028	0.055
08/03/10	0.033	0.029	0.029	0.029	0.054
08/04/10	0.034	0.030	0.030	0.030	0.053

08/05/10	0.034	0.030	0.030	0.030	0.052
08/06/10	0.035	0.031	0.031	0.031	0.051
08/07/10	0.034	0.031	0.031	0.031	0.050
08/08/10	0.034	0.032	0.031	0.032	0.050
08/09/10	0.034	0.033	0.032	0.033	0.050
08/10/10	0.034	0.034	0.033	0.034	0.049
08/11/10	0.035	0.035	0.034	0.035	0.047
08/12/10	0.036	0.036	0.035	0.036	0.046
08/13/10	0.038	0.038	0.037	0.038	0.047
08/14/10	0.039	0.038	0.038	0.038	0.047
08/15/10	0.040	0.039	0.039	0.039	0.049
08/16/10	0.042	0.040	0.039	0.040	0.050
08/17/10	0.043	0.042	0.040	0.042	0.051
08/18/10	0.043	0.042	0.041	0.042	0.052
08/19/10	0.043	0.043	0.042	0.042	0.053
08/20/10	0.044	0.044	0.043	0.042	0.052
08/21/10	0.044	0.044	0.044	0.042	0.052
08/22/10	0.044	0.044	0.044	0.043	0.052
08/23/10	0.044	0.044	0.045	0.044	0.052
08/24/10	0.045	0.045	0.045	0.044	0.053
08/25/10	0.045	0.045	0.045	0.044	0.053
08/26/10	0.046	0.046	0.046	0.045	0.054
08/27/10	0.047	0.047	0.047	0.046	0.055
08/28/10	0.047	0.047	0.047	0.046	0.055
08/29/10	0.047	0.047	0.047	0.046	0.056
08/30/10	0.048	0.048	0.048	0.047	0.056
08/31/10	0.049	0.049	0.048	0.047	0.057
09/01/10	0.048	0.048	0.049	0.047	0.057
09/02/10	0.047	0.047	0.049	0.048	0.058
09/03/10	0.047	0.047	0.049	0.049	0.059
09/04/10	0.045	0.045	0.047	0.048	0.060
09/05/10	0.044	0.044	0.046	0.046	0.061
09/06/10	0.043	0.043	0.044	0.044	0.062
09/07/10	0.043	0.043	0.043	0.043	0.062
09/08/10	0.043	0.043	0.043	0.043	0.063
09/09/10	0.043	0.043	0.043	0.043	0.064
09/10/10	0.043	0.043	0.043	0.044	0.063
09/11/10	0.043	0.043	0.043	0.044	0.063
09/12/10	0.042	0.042	0.042	0.043	0.063

09/13/10	0.042	0.042	0.042	0.043	0.063
09/14/10	0.042	0.042	0.042	0.043	0.064
09/15/10	0.041	0.041	0.041	0.042	0.064
09/16/10	0.041	0.041	0.041	0.042	0.065
09/17/10	0.041	0.041	0.041	0.042	0.066
09/18/10	0.041	0.041	0.041	0.041	0.066
09/19/10	0.040	0.040	0.040	0.040	0.066
09/20/10	0.040	0.040	0.040	0.040	0.064
09/21/10	0.040	0.040	0.040	0.040	0.063
09/22/10	0.040	0.040	0.040	0.040	0.063
09/23/10	0.040	0.040	0.040	0.040	0.063
09/24/10	0.040	0.040	0.040	0.040	0.063
09/25/10	0.040	0.039	0.040	0.039	0.062
09/26/10	0.040	0.037	0.040	0.037	0.062
09/27/10	0.040	0.037	0.040	0.037	0.063
09/28/10	0.040	0.036	0.040	0.036	0.063
09/29/10	0.040	0.035	0.040	0.035	0.063
09/30/10	0.040	0.034	0.040	0.034	0.063
10/01/10	0.040	0.034	0.040	0.034	0.064
10/02/10	0.040	0.033	0.040	0.033	0.063
10/03/10	0.040	0.032	0.040	0.032	0.063
10/04/10	0.039	0.032	0.040	0.032	0.062
10/05/10	0.039	0.033	0.040	0.033	0.061
10/06/10	0.041	0.035	0.040	0.033	0.061
10/07/10	0.040	0.035	0.040	0.033	0.060
10/08/10	0.039	0.034	0.040	0.033	0.059
10/09/10	0.038	0.034	0.040	0.033	0.058
10/10/10	0.038	0.034	0.040	0.033	0.058
10/11/10	0.037	0.033	0.040	0.033	0.058
10/12/10	0.036	0.031	0.040	0.033	0.058
10/13/10	0.037	0.031	0.039	0.033	0.057
10/14/10	0.037	0.031	0.039	0.033	0.057
10/15/10	0.038	0.031	0.039	0.033	0.056
10/16/10	0.038	0.030	0.039	0.032	0.056
10/17/10	0.038	0.030	0.039	0.031	0.056
10/18/10	0.037	0.030	0.039	0.031	0.056
10/19/10	0.037	0.030	0.039	0.032	0.056
10/20/10	0.037	0.030	0.039	0.031	0.056
10/21/10	0.037	0.031	0.039	0.031	0.056

10/22/10	0.037	0.031	0.039	0.032	0.056
10/23/10	0.037	0.031	0.039	0.032	0.056
10/24/10	0.037	0.032	0.039	0.032	0.056
10/25/10	0.038	0.032	0.039	0.032	0.056
10/26/10	0.038	0.032	0.039	0.033	0.056
10/27/10	0.039	0.034	0.039	0.034	0.056
10/28/10	0.040	0.036	0.039	0.035	0.056
10/29/10	0.041	0.038	0.039	0.036	0.056
10/30/10	0.041	0.039	0.039	0.036	0.056
10/31/10	0.042	0.040	0.039	0.037	0.056
11/01/10	0.043	0.041	0.040	0.038	0.055
11/02/10	0.043	0.042	0.040	0.040	0.055
11/03/10	0.044	0.043	0.040	0.041	0.055
11/04/10	0.045	0.045	0.041	0.041	0.055
11/05/10	0.044	0.046	0.041	0.041	0.056
11/06/10	0.046	0.047	0.042	0.041	0.058
11/07/10	0.046	0.046	0.043	0.042	0.058
11/08/10	0.048	0.047	0.045	0.044	0.058
11/09/10	0.050	0.050	0.047	0.045	0.058
11/10/10	0.052	0.052	0.049	0.047	0.058
11/11/10	0.052	0.052	0.048	0.048	0.058
11/12/10	0.053	0.053	0.049	0.050	0.060
11/13/10	0.054	0.054	0.049	0.051	0.059
11/14/10	0.055	0.055	0.049	0.052	0.059
11/15/10	0.056	0.056	0.050	0.053	0.058
11/16/10	0.057	0.057	0.051	0.054	0.058
11/17/10	0.058	0.058	0.051	0.055	0.057
11/18/10	0.058	0.058	0.052	0.056	0.057
11/19/10	0.059	0.059	0.053	0.057	0.058
11/20/10	0.059	0.059	0.054	0.058	0.058
11/21/10	0.060	0.060	0.055	0.058	0.059
11/22/10	0.061	0.061	0.056	0.059	0.059
11/23/10	0.061	0.061	0.057	0.060	0.060
11/24/10	0.062	0.062	0.058	0.060	0.060
11/25/10	0.062	0.062	0.059	0.061	0.060
11/26/10	0.063	0.063	0.059	0.062	0.060
11/27/10	0.063	0.063	0.060	0.062	0.060
11/28/10	0.063	0.063	0.061	0.063	0.060
11/29/10	0.063	0.063	0.062	0.063	0.061

11/30/10	0.063	0.063	0.063	0.063	0.061
12/01/10	0.064	0.064	0.064	0.063	0.062
12/02/10	0.063	0.063	0.063	0.063	0.061
12/03/10	0.063	0.063	0.063	0.062	0.061
12/04/10	0.062	0.062	0.062	0.062	0.061
12/05/10	0.062	0.062	0.062	0.061	0.061
12/06/10	0.062	0.062	0.062	0.062	0.061
12/07/10	0.063	0.063	0.063	0.063	0.062
12/08/10	0.063	0.063	0.063	0.063	0.062
12/09/10	0.062	0.062	0.062	0.062	0.062
12/10/10	0.062	0.062	0.062	0.062	0.062
12/11/10	0.063	0.063	0.063	0.063	0.062
12/12/10	0.064	0.064	0.064	0.064	0.062
12/13/10	0.064	0.064	0.064	0.064	0.061
12/14/10	0.065	0.065	0.065	0.065	0.061
12/15/10	0.066	0.066	0.066	0.066	0.061
12/16/10	0.066	0.066	0.066	0.066	0.060
12/17/10	0.067	0.067	0.067	0.067	0.060
12/18/10	0.067	0.067	0.067	0.067	0.060
12/19/10	0.068	0.068	0.068	0.068	0.060
12/20/10	0.068	0.068	0.068	0.068	0.060
12/21/10	0.069	0.069	0.069	0.069	0.060
12/22/10	0.069	0.069	0.069	0.069	0.060
12/23/10	0.069	0.069	0.069	0.069	0.060
12/24/10	0.070	0.070	0.070	0.070	0.060
12/25/10	0.070	0.070	0.070	0.070	0.060
12/26/10	0.070	0.070	0.070	0.070	0.059
12/27/10	0.071	0.071	0.071	0.071	0.059
12/28/10	0.071	0.071	0.071	0.071	0.059
12/29/10	0.072	0.072	0.072	0.072	0.059
12/30/10	0.073	0.073	0.073	0.073	0.060
12/31/10	0.072	0.072	0.072	0.072	0.061

W.H. Sammis Unit 6&7 Particulate Test Results
August 10, 2010

Grace Consulting, Inc.
Emissions Testing Services

August 29, 2010

I, Tim Moody, hereby certify that the data obtained for FirstEnergy Corp. at the Sammis Plant, CSA & CSB are in accordance with procedures set forth by the USEPA. This report accurately represents the data obtained from the testing procedures and analysis of this data.

Tim Moody, QSTI
Crew Chief

I, Carl Vineyard, hereby certify that I have reviewed this report and to the best of my knowledge, the data presented herein is complete and accurate.

Carl Vineyard, P.E., QSTI
Test Engineer

Grace Consulting, Inc.
P.O. Box 58
510 Dickson St.
Wellington, OH 44090

Phone: 440-647-6672
Fax: 440-647-6673
www.gcitest.com

W.H. Sammis Unit 6&7 Particulate Test Results
August 10, 2010

INTRODUCTION

This report presents the results of the Particulate emissions tests performed for FirstEnergy Corp. at the Sammis Plant, CSA & CSB.

The purpose of the tests was to determine the emissions of the units for compliance. The results can be found in the Summary of Test Results section of this report.

The testing was performed by Grace Consulting, Inc., located at 510 Dickson Street - Wellington, OH 44090. Present during the testing were Tim Moody, Steve Tully, Kyler Herner, Mark Howard, Brett Columbo, and Ken Myer from Grace Consulting, Inc. Debi Schramm was present from FirstEnergy Service Corp.

The tests were performed on August 10, 2010. The testing was completed in accordance with USEPA test methods as published in the July 1, 2010 Federal Register, - "Standards of Performance for New Stationary Sources" and subsequent revisions, except as noted.

The sampling and analytical procedures can be found in the Sampling and Analytical Procedures section of this report. The raw field data and the equations used to determine the final results are presented in the Appendix section.

W.H. Sammis Unit 6&7 Particulate Test Results
August 10, 2010

SUMMARY OF TEST RESULTS
The following presents the results of the emissions tests performed for FirstEnergy Corp. at the Sammis Plant, CSA & CSB.

PARTICULATE EMISSIONS
CSA Results

Run #	Description	lb/dscf	lbs/hr	lb/mmBtu
1	Method 5	3.06E-07	34.94	0.005
2	Method 5	5.04E-07	58.14	0.008
3	Method 5	8.75E-07	98.86	0.014
AVG.		5.62E-07	63.98	0.009

CSB Results

Run #	Description	lb/dscf	lbs/hr	lb/mmBtu
1	Method 5	4.41E-07	53.72	0.007
2	Method 5	4.38E-07	60.28	0.008
3	Method 5	4.40E-07	51.92	0.007
AVG.		4.60E-07	55.31	0.007

VISIBLE EMISSIONS

Run #	Test Date	Times	%Opacity
1	08-10-10	09:15-10:15	5.00%
2	08-10-10	11:00-12:00	6.17%
3	08-10-10	12:50-13:50	8:13%

The complete results can be found on the computer printouts following.

BRUCE MANSFIELD UNIT 1 SCRUBBER EFFICIENCY TEST
October 21, 2010

Introduction

First Energy performed testing to determine the sulfur dioxide removal efficiency of the scrubber installed on Mansfield Units 1. The test was conducted October 21, 2010. This test was done in accordance with the Consent Decree entered into by Ohio Edison and Pennsylvania Power Companies on March 18, 2005.

Testing Procedures

The test program incorporated procedures acceptable to the U.S. Environmental Protection Agency (EPA) and the Pennsylvania Department of Environmental Protection (PADEP). Specifically, these tests were conducted in accordance with the Code of Federal Regulations, Title 40, Part 60, Appendix A, Methods 19 – Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxide Emission Rates.

Sulfur Dioxide Removal Efficiency

FirstEnergy determined the sulfur dioxide removal efficiencies (on a percentage basis) that were achieved by comparing the actual (emitted to atmosphere) sulfur dioxide mass emission rates (in lbs/hr) with the potential (amount introduced into boiler) sulfur dioxide mass emission rates (in lbs/hr). A total of three one-hour test periods was conducted.

The actual sulfur dioxide mass emission rates at the stack were determined by the state and federal certified continuous emission monitoring systems. The test program consisted of performing three (3) test runs concurrently on the Units 1 flues designated as Unit 1A and Unit 1B. Each test run period was 60 minutes.

The potential sulfur dioxide mass rates into the scrubber were calculated from coal samples collected and analyzed by FirstEnergy and coal feed rates. Individual test percentage reductions were determined by comparing each set of one-hour actual and potential mass emission rates.

All relevant operating parameters were recorded by the plant data acquisition system.

Removal Efficiency

Run Number	1	2	3	Average
Unit 1 Potential SO2 Emissions (Calculated				
SO2 (lb/hr)	41540	44294	40507	42114
SO2 (lb/MMBtu)	4.5518	4.8555	4.3717	4.5930
Unit 1 SO2 Emissions Actual (CEMS)				
Unit 1 A Stack Measured Emissions				
SO2 (lb/hr)	441.62	250.98	229.63	307.41
SO2 (lb/MMBtu)	0.11462	0.06487	0.05997	0.07982
Unit 1 B Stack Measured Emissions				
SO2 (lb/hr)	772.76	781.04	742.61	765.47
SO2 (lb/MMBtu)	0.18457	0.18822	0.17693	0.18324
Total Measured SO2 Emitted From Unit				
SO2 (lb/hr)	1214.39	1032.03	972.24	1072.88
SO2 (lb/MMBtu)	0.14960	0.12655	0.11845	0.13153
Unit 1 SO2 Removal Efficiency				
RE (based on lb/hr)	97.08	97.67	97.60	97.45
RE (based on lb/MMBtu)	96.71	97.39	97.29	97.13

BRUCE MANSFIELD UNIT 2 SCRUBBER EFFICIENCY TEST
October 21, 2010

Introduction

First Energy performed testing to determine the sulfur dioxide removal efficiency of the scrubber installed on Mansfield Units 2. The test was conducted October 21, 2010. This test was done in accordance with the Consent Decree entered into by Ohio Edison and Pennsylvania Power Companies on March 18, 2005.

Testing Procedures

The test program incorporated procedures acceptable to the U.S. Environmental Protection Agency (EPA) and the Pennsylvania Department of Environmental Protection (PADEP). Specifically, these tests were conducted in accordance with the Code of Federal Regulations, Title 40, Part 60, Appendix A, Methods 19 – Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxide Emission Rates.

Sulfur Dioxide Removal Efficiency

FirstEnergy determined the sulfur dioxide removal efficiencies (on a percentage basis) that were achieved by comparing the actual (emitted to atmosphere) sulfur dioxide mass emission rates (in lbs/hr) with the potential (amount introduced into boiler) sulfur dioxide mass emission rates (in lbs/hr). A total of three one-hour test periods was conducted.

The actual sulfur dioxide mass emission rates at the stack were determined by the state and federal certified continuous emission monitoring systems. The test program consisted of performing three (3) test runs concurrently on the Unit's 2 flues designated as Unit 2A and Unit 2B. Each test run period was 60 minutes.

The potential sulfur dioxide mass rates into the scrubber were calculated from coal samples collected and analyzed by FirstEnergy and coal feed rates. Individual test percentage reductions were determined by comparing each set of one-hour actual and potential mass emission rates.

All relevant operating parameters were recorded by the plant data acquisition system.

Removal Efficiency

Run Number	1	2	3	Average
Unit 2 Potential SO2 Emissions (Calculated				
SO2 (lb/hr)	53457	53085	49754	52099
SO2 (lb/MMBtu)	5.2425	5.1308	4.7977	5.0570
Unit 2 SO2 Emissions Actual (CEMS)				
Unit 2 A Stack Measured Emissions				
SO2 (lb/hr)	560.39	573.78	545.22	559.80
SO2 (lb/MMBtu)	0.15077	0.15388	0.14879	0.15115
Unit 2 B Stack Measured Emissions				
SO2 (lb/hr)	1055.95	1431.81	1311.20	1266.32
SO2 (lb/MMBtu)	0.26510	0.35504	0.32417	0.31477
Total Measured SO2 Emitted From Unit				
SO2 (lb/hr)	1616.34	2005.59	1856.42	1826.12
SO2 (lb/MMBtu)	0.20793	0.25446	0.23648	0.23296
Unit 2 SO2 Removal Efficiency				
RE (based on lb/hr)	96.98	96.22	96.27	96.49
RE (based on lb/MMBtu)	96.03	95.04	95.07	95.38

BRUCE MANSFIELD UNIT 3 SCRUBBER EFFICIENCY TEST
December 10, 2010

Introduction

FirstEnergy performed testing to determine the sulfur dioxide removal efficiency of the scrubber installed on Mansfield Unit 3. The test was conducted December 10, 2010. This test was done in accordance with the Consent Decree entered into by Ohio Edison and Pennsylvania Power Companies on March 18, 2005.

Testing Procedures

The test program incorporated procedures acceptable to the U.S. Environmental Protection Agency (EPA) and the Pennsylvania Department of Environmental Protection (PADEP). Specifically, these tests were conducted in accordance with the Code of Federal Regulations, Title 40, Part 60, Appendix A, Methods 19 – Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxide Emission Rates.

Sulfur Dioxide Removal Efficiency

FirstEnergy determined the sulfur dioxide removal efficiencies (on a percentage basis) that were achieved by comparing the actual (emitted to atmosphere) sulfur dioxide mass emission rates (in lbs/hr) with the potential (amount introduced into boiler) sulfur dioxide mass emission rates (in lbs/hr). A total of three one-hour test periods was conducted.

The actual sulfur dioxide mass emission rates at the stack were determined by the state and federal certified continuous emission monitoring systems. The test program consisted of performing three (3) test runs concurrently on the Units 3 flues designated as Unit 3A and Unit 3B. Each test run period was 60 minutes.

The potential sulfur dioxide mass rates into the scrubber were calculated from coal samples collected and analyzed by FirstEnergy and coal feed rates. Individual test percentage reductions were determined by comparing each set of one-hour actual and potential mass emission rates.

All relevant operating parameters were recorded by the plant data acquisition system.

Removal Efficiency

Run Number	1	2	3	Average
Unit 3 Potential SO2 Emissions (Calculated				
SO2 (lb/hr)	53684	49352	50553	51196
SO2 (lb/MMBtu)	5.3667	4.8457	5.0186	5.0770
Unit 3 SO2 Emissions Actual (CEMS)				
Unit 3 A Stack Measured Emissions				
SO2 (lb/hr)	461.69	447.92	415.98	441.86
SO2 (lb/MMBtu)	0.12456	0.12022	0.11385	0.11955
Unit 3 B Stack Measured Emissions				
SO2 (lb/hr)	404.77	392.89	363.26	386.98
SO2 (lb/MMBtu)	0.11580	0.11142	0.10510	0.11077
Total Measured SO2 Emitted From Unit				
SO2 (lb/hr)	866.46	840.81	779.25	828.84
SO2 (lb/MMBtu)	0.12018	0.11582	0.10947	0.11516
Unit 3 SO2 Removal Efficiency				
RE (based on lb/hr)	98.39	98.30	98.46	98.38
RE (based on lb/MMBtu)	97.76	97.61	97.82	97.73